**Mr. Alpert’s Honors Conceptual Physics  
  
Lab Report Requirements: Metric Conversion Lab**

1. **Title of Lab**. Do not make up a name such as, “water lab.” Use the title in the handout.
2. **Your Name and name of your partners**
3. **Date**
4. **Background:** You are to investigate the history and reasoning behind the Metric System (also known as *Systeme Internationale* or *SI*) and write two paragraphs regarding its foundation, use and international acceptance.
5. **Purpose:** Found in your handout
6. **Hypotheses:**
7. “If the volume of a cylindrical or hollow rectangular solid is measured in cubic centimeters, then it will be numerically equal to the volume of that object in millimeters when filled with water.”
8. If the volume of a cylindrical or hollow rectangular solid is measured in cubic centimeters, then it will be numerically equal to the mass in grams when filled with water.”
9. **Materials:** Found in your handout
10. **Variables:** Independent, dependent and controlled variables (found in your handout)
11. **Procedure** in Past tense, passive voice (example: *The materials were gathered, the dimensions of the box were measured, the box was filled with water etc*.)
12. **Data table:** In particular, you are to show the results of the two experiments which compared cubic centimeters to millimeters and cubic centimeters to grams. Include your percent error**1.**
13. Wr**ap up questions:** You are to “reflect” the questions in your answers. Do not write #2. “Yes” but rather, write, #2, Yes, we did a correlation between metric volume in cubic centimeters and metric volume in millimeters.” If, in fact, that was what question two was asking.
14. **Conclusion:** What did you learn from this lab. Was the hypothesis supported by the data, sources of error, possible next steps in a new investigation.

**Works sited:** Use MLA format to cite the sources you used in your background

**Format:** The lab is to be double spaced in MLA format with your last name and page number as a header in the upper right corner of each page.

1. Percent error may be calculated by taking the absolute difference between your calculated volume in cubic centimeters and your measured volume in millimeters and dividing this number by the volume in millimeters. This will give you a decimal answer which shall be multiplied by 100 to convert to percent. Your percent error shall be less than ten percent to be accepted.

